CLAIMS

I (WE) CLAIM:

A wireless communication system operative for transmission of packet 1. data and low delay data on a plurality of transmission channels, the system comprising:

> a first set of channels within the plurality of transmission channels, the first set of channels being assigned to packet data transmissions and packet data being transmitted in frames;

> a second set of channels within the plurality of transmission channels, the second set of channels being assigned to low delay data transmissions; and

a signaling channel within the plurality of transmission channels, the signaling channel being assigned to message transmissions, wherein each message identifies a packet data target recipient.

2. The wireless communication system of claim 1, wherein a first message is transmitted on the signaling channel concurrently with an associated first

packet data frame, and wherein the first message identifies a first packet data

target recipient associated with the first packet data frame.

3. The wireless communication system of claim 1, wherein the first message identifies a subset of the first set of channels assigned to transmission of the first packet data.

The wireless communication system of claim 1, wherein the first message identifies a coding scheme used for transmission of the first packet data.

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5. A wireless apparatus operative within the system of claim 1, the wireless
 2 apparatus operative to receive packet data via at least one of the first set of channels and to receive messages via the signaling channel, the wireless
 4 apparatus comprising:

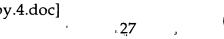
a buffer operative to store packet data received via the at least one of the first set of channels;

a processor coupled to the buffer, the processor operative to determine target recipient information from the received messages; and a decoder coupled to the processor, the decoder operative to decode data packets received if the wireless apparatus is a target recipient and ignore data packets if the wireless apparatus is not the target recipient.

- 6. The wireless apparatus of claim 5, wherein the target recipient information may identify multiple recipients.
- The wireless apparatus of claim 6, further comprising:
 a memory storage device coupled to the processor, the memory storage device storing computer readable instructions operative to control the decoder.
- 8. In a wireless communication system, the system supporting packet data 2 transmissions and low delay data transmissions over a plurality of transmission channels, a method comprising:
- transmitting packet data via a set of packet data channels; and transmitting control information associated with the packet data via a signaling channel, wherein the signaling channel is separate from the set of packet data channels, and wherein the control information identifies a target recipient of associated packet data.
- 9. The method of claim 8, wherein the control information further identifies2 a coding scheme for the packet data.

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- The method of claim 9, further comprising:
 receiving data requests from a plurality of mobile units; and determining a transmission schedule according to the data requests.
- The method of claim 10,
 assigning a priority level to each of the plurality of mobile units; and determining a traffic schedule among the plurality of mobile units based
 on priority level.
- 12. The method of claim 11, wherein a high priority is given to a mobile unit2 experiencing less interference than other of the plurality of mobile units.
 - 13. A wireless apparatus operative to receive packet data via at least one of the first set of channels, the wireless apparatus comprising:
 - determine target recipient information and coding information from a received messages; and

a data rate determination unit operative to calculate a data rate in accordance with the target recipient information and the coding information.

- 14. The apparatus of claim 13, wherein the apparatus is operative within a
 2 wireless communications system supporting high rate packet data
 transmissions and low delay data transmissions.
 - 15. The apparatus of claim 13, further comprising:
- 2 a buffer coupled to the processor, the buffer operative to store packet data received via the at least one of the first set of channels;
- a decoder coupled to the processor, the decoder operative to decode data packets received if the wireless apparatus is a target recipient and ignore data packets if the wireless apparatus is not the target recipient.

- 16. The apparatus of claim 13, wherein the target recipient information
- 2 identifies multiple target recipients.
 - 17. The apparatus of claim 13, wherein the coding information is
- 2 predetermined by a transmitter and is used to encode the packet data, and wherein the apparatus further comprises:
- a decoder coupled to the processor, the decoder responsive to the coding information to decode received packet data.

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